Remarks/Arguments

Applicants have received and carefully reviewed the Office Action of the Examiner mailed March 13, 2008. Currently, claims 5-31, 52, 54-72, and 74-95 remain pending of which claims 5-31 were previously withdrawn. Claims 52, 54-72, and 74-95 have been rejected. Favorable consideration of the following remarks is respectfully requested.

Claim Rejections - 35 USC § 102

Claims 52, 54, 55, 57-63, 70-72, 74, 75, 77-83, and 90-95 were rejected under 35 U.S.C. 102(e) as anticipated by Wholey et al. (U.S. Patent No. 6,652,554), hereinafter Wholey. After careful review, Applicant must respectfully traverse this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). (See MPEP § 2131). Nowhere does Wholey appear to teach or suggest, a filter membrane or filtering region "further comprising a first tapered portion and a second tapered portion, a portion of the first tapered portion defining a first included angle, and the second tapered portion extending proximally from a proximal portion of the first tapered portion, a portion of the second tapered portion defining a second included angle greater than the first included angle", or "further comprising a first tapered portion and a second tapered portion, a portion of the first tapered portion defining a second included angle and a portion of the second tapered portion defining a second included angle and a portion of the second tapered portion defining a second included angle which is different than the first included angle" as recited in claims 52 and 72.

Instead, Wholey appears to teach a generally cup-shaped filter having the form of a spherical cap. A spherical cap does not possess one or more tapered portions as taper and tapered are defined: noun: the property possessed by a shape that narrows toward a point (as a wedge or cone): a convex shape that narrows toward a point. Figure I, as altered by the Examiner appears to include a number of errors. First, the lines labeled "First Angle" and "Second Angle", respectively are not angles, but rather simple

line segments. An angle is the space between two lines or planes that intersect; the inclination of one line to another. Accordingly, an angle requires two lines (or two planes or a plane and a line) to be defined. The relative positioning of the two lines supplied by the Examiner is unclear; however the figure suggests that the line labeled "Second Angle" may have been intended to be tangent to the spherical cap at a point slightly to the right of reference numeral 4 and that the line labeled "First Angle" contacts the rim of the spherical cap a bit to the right of reference numeral 6, enters the spherical cap, and exits again in the vicinity of reference numeral 7. Neither line appears to be appropriate to serve as the generatrix of a surface of revolution such as the spherical cap of Wholey. As drawn, the lines do not appear to intersect in three dimensions. Taken together, the two lines might be construed to define a single dihedral angle if the Examiner had provided a third line connecting the two to define the two intersecting planes. If the line labeled "First Angle" is taken to be coplanar with the axis, it might form a generatrix of nappes, one of which could define a filter body. Similarly, the line labeled "Second Angle" could be the generatrix of a second pair of nappes, however the neither of nappes in question would coincide with the surface of the spherical cup of Wholey at more than circles and so Wholey would not appear to anticipate the geometry of the two sections of filter membrane of the pending invention. Applicant is at a loss as to the significance of these lines or their relevance to the claims under consideration and requests clarification in the next non-final Office Action. In the absence of further information, an attempt will be made to further prosecution by interpreting the figure in view of the comments regarding claims 54, 55, 74, and 75.

If one sections a spherical cap with planes as possibly being proposed by the Examiner, one does not obtain a cone or a frustoconical shape. Instead, one obtains a smaller spherical cap, a spherical segment, or zone, or, of course, a point. The smaller cap and the segment both would have the same radius and center and the join between them would be indistinguishable. They would be a single section. If the lines of the altered Figure 1 are intended to denote planes passing through and tangent to the spherical cap respectively, said planes also being orthogonal to the plane of the figure, the first line appears to generate an incomplete spherical cap and the second generates a point of tangency. In either event, there does not appear to be a sectioning of a spherical cap

which results in the tapered, conical and frustoconical portions described at page 2, lines 17-22 of the pending application and repeated formally in claims 52 and 72. (Applicants would be happy to modify claims 52 and 72 to explicitly describe the portions of the filter as tapered, conical and frustoconical portions if that would advance prosecution.) In the absence of such guidance, Applicants must assert that Wholey does not anticipate the geometries of the pending claims 52 and 72, as indicated in the respective quotations therefrom presented above, and respectfully request that the rejections be withdrawn.

For these and other reasons, claims 54, 55, 57-63, 70, 71, 74, 75, 77-83, and 90-95, which depend from independent claims 52 and 72 respectively, are believed to be not anticipated by Wholey and Applicants respectfully request that the rejections be withdrawn.

Claim Rejections - 35 USC § 103

Claims 56 and 76 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wholey (U.S. Patent No. 6,652,554) in view of Daniel et al. (U.S. Patent No. 5,814,064), hereinafter Daniel. After careful review, Applicant must respectfully traverse this rejection.

"All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). (MPEP § 2143.03). As discussed previously, nowhere does Wholey appear to disclose a filter membrane or filtering region "further comprising a first tapered portion and a second tapered portion, a portion of the first tapered portion defining a first included angle, and the second tapered portion extending proximally from a proximal portion of the first tapered portion, a portion of the second tapered portion defining a second included angle greater than the first included angle", or "further comprising a first tapered portion and a second tapered portion of the second tapered portion defining a first included angle and a portion of the second tapered portion defining a second included angle which is different than the first included angle" as recited in claims 52 and 72 respectively. Claims 56 and 76 depend from claims 52 and 72 respectively and add significant further limitations thereto. Furthermore, nowhere does Daniel et al.

appear to remedy the absence of the required filter geometry in Wholey as discussed above. Therefore, Wholey et al. in view of Daniel does not appear to teach all the claim limitations, as is required to establish a *prima facie* case of obviousness, and Applicants respectfully request withdrawal of the rejections.

Claims 64-69 and 84-89 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wholey (U.S. Patent No. 6,652,554), as applied to claims 52 and 72, in view of Mazzocchi et al. (U.S. Patent No. 6,605,102), hereinafter Mazzocchi. After careful review, Applicant must respectfully traverse this rejection.

Claims 64-69 and 84-89 depend from claims 52 and 72 and add significant limitations thereto. Wholey does not appear to teach the filter geometry required by claims 52 and 72 as discussed in detail above. Mazzocchi does not appear to remedy the absence of the required filter geometry in Wholey. Therefore, Wholey et al. in view of Mazzochi does not appear to teach all the claim limitations, as is required to establish a prima facie case of obviousness and Applicants respectfully request that the rejections be withdrawn.

In view of the foregoing, all pending claims are believed to be in a condition for allowance. Reexamination and reconsideration are respectfully requested. Issuance of a Notice of Allowance in due course is anticipated. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Date: May 13, 200 8

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